INTERIM REPORT

ON

A TAXONOMY OF CANADIAN CONSUMERS WITH RESPECT TO SELECTED ENERGY USES AND ALTERNATIVE POLICIES FOR REDUCING ENERGY CONSUMPTION

Submitted to Consumer Research Branch,

Department of Consumer and Corporate Affairs

by

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August 31, 1978

INTRODUCTION

This interim report is submitted in conformity with the requirements of the contract for the research entitled "A Taxonomy of Canadian Consumers with respect to Selected Energy Uses and Alternative Policies for Reducing Energy Consumption". The complete proposal for this research is attached for reference purposes as Annex A. The contents of this report fall into three broad categories;

(1) a summary of the activities of the researchers during the period May 1 - August 31, 1978.

(2) research instruments as they have been developed to date.

(3) as outline of future major activities required to complete the research and their anticipated timing.

OBJECTIVES OF THE RESEARCH

It will be recalled that the present research has 4 major objectives, namely;

Objective 1

To measure and classify household patterns of energy consumption as they relate to automobile use, home heating and other selected consumer products and activities.

Objective 2

To establish the relationship in the Canadian setting between patterns of energy consumption and household characteristics.

Objective 3

To determine the relationship between patterns of energy consumption and consumer lifestyles, attitudes, interests, opinions and knowledge.

Objective 4

To identify and conduct preliminary evaluations of the dimensions of alternative policy proposals related to product/service design and use which might reduce levels of energy consumption.

A more detailed presentation of these objectives and their related sub-objectives is given in Annex A.

SUMMARY OF RESEARCH ACTIVITIES: MAY-AUGUST 1978

The major research activities to date have been concentrated in three main areas;

(1) additional review and study of the literature related to the research topic.

(2) meetings of the principal researchers to refine the research design and to develop data collection instruments.

(3) pre-testing of data collection instruments.

(4) contact by the principal researchers and/or research assistants with agencies and organizations capable of facilitating or or assisting with the research.

Additional Study of the Literature

Efforts in this area have focused on a limited number of documents felt to be particularly relevant to the present study. These documents have included;

- The Role of the Automobile Study - a multi-volume report on studies carried out by or for Transport Canada
- A Study of the Canadian Public's Attitudes toward the Energy Situation in Canada, Waves I-IV, - conducted for the Department of Energy, Mines and Resources.

- Energy Use and Conservation Incentives - A Study of the Southwest United States conducted by W. H. Cunningham and S. Lopreato.

- The American Energy Consumer - A Report by D. K. Newman and D. Day.

Meetings of Principal Researchers

A number of meetings have been held by the principal researchers to refine the overall research strategy and to develop the data collection instruments. The following is a list of these meetings;

- May 29-30 in London, Ontario. Meeting of principal researchers and Dr. John Evans and Mr. Lee McCabe of CCA. Major issues discussed were overall research approach as outlined in the proposal (Annex A) and related research being conducted by Dr. McDougall within the University of Western Ontario Research Associates Workshop. Discussions at this point were tentative in that contract had not yet been formally signed by the minister.

- August 4-7 in Vancouver, B.C.. Meeting of principal researchers to develop research design. The focus of this session was on the results of the related research conducted by Dr. McDougall during June and July and the implications of these results for the research methodology to be employed in the present study. Considerable effort was given to revision of the questionnaire for the research in light of Dr. McDougall's experience.

- August 16-18 in Hull, Quebec. Further revision and refinement of the research design and questionnaire in light of the experience gained through pre-testing during period of August 8-16.

- August 30 in Hull, Quebec. Discussion of revised research plan and questionnaire. Submission of questionnaire to Department of Energy, Mines and Resources for comments and advice.

Pre-Testing of Data Collection Instruments

Pre-testing of the data collection instruments involved evaluating both the form of the data collection as well as its content. The content

of the questionnaire may be viewed as falling into three broad categories;

(a) data concerning consumer energy use levels and energy related behavior and factors affecting them (Part 1).

(b) measures of social responsibility (Part 2).

(c) preliminary measures of the acceptability of alternative energy conservation measures (Part 3).

Efforts to date have focused on items (a) and (b) above. During the months of June/July, Dr. McDougall tested the ability of 400 consumers to supply the necessary information via personnel interviews conducted in the home. Since this type of data collection is costly, it imples the use of smaller sample sizes than might be possible via alternative approaches. In an effort to obtain larger sample sizes, a pre-test was conducted in which it was attempted to gain the necessary information via telephone interviews. While this approach was generally satisfactory it proved to be unacceptable with respect to two key measures and was subsequently dismissed as a possible approach. Current efforts are being focused on the development of measures which can be administered by mail to a national consumer panel. It is hoped that this approach will enable the gathering of even more detailed data, as suggested by representatives of EMR (see below). This approach is currently being prepared for pre-testing. Should this method not be acceptable, it will be necessary to revert to a personal interview approach and accept the smaller sample sizes implied by this method.

Contacts with Relevant Agencies and Organizations

There are a number of agencies and organizations which it is felt could contribute to the success of the present research in one or both of two different ways;

(a) by providing access to actual energy consumption data to corroborate that provided by consumers. These organizations primarily include utilities and oil companies.

(b) by providing an assessment of the adequacy, relevance and feasibility of the proposed measures of energy use levels and energy related behaviors.

Based on these objectives, discussions were initiated with the following agencies/organizations;

- The Canadian Energy Research Institute, The University of Calgary
- Canadian Electrical Association
- Ontario Hydro
- Department of Energy, Mines and Resources, Government of Canada
- Professors R. Turner and S. Arnold, School of Business, Queen's University, who are involved in a related study for the Ontario Government

In addition, contacts were initiated with several national research houses in an effort to obtain time and cost estimates for alternative research designs and data collection methods.

RESEARCH INSTRUMENTS DEVELOPED TO DATE

As a result of the above activities, it has been possible to develop the various data collection instruments and associated measures which will be required by the research. These instruments and measures, as they have been developed as of August 31, 1978, are provided in Annex B. As noted earlier, the questionnaire is still undergoing pre-testing and revision. The final version will be provided to CCA prior to full scale field administration.

FUTURE ACTIVITIES

The execution of the present research involves a large number of activities which must be carried out both sequentially and in parallel. Annex C contains the time-table for project execution as developed in early August, 1978. While certain dates depend on the final form of the research design and data collection instruments, the time-table presented remains generally valid. Necessary modifications and updates of the time-table will be provided to CCA as they are made.

In general term, the following key activities and their expected completion dates should be noted;

- final questionnaire developed - September 30, 1978
- full scale data collection - October 15 to November 15, 1978
- preliminary analysis/preliminary report - February 28, 1978
- complete analysis/final report - April 30, 1978

ANNEX A

ORIGINAL RESEARCH PROPOSAL

A TAXONOMY OF CANADIAN CONSUMERS WITH RESPECT TO SELECTED ENERGY USES AND ALTERNATIVE POLICIES FOR REDUCING ENERGY CONSUMPTION

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OBJECTIVES OF THE RESEARCH

The proposed research has three main objectives involving a number of sub-objectives:

Objective 1

To measure and classify household patterns of energy consumption as they relate to automobile use, home heating and other selected consumer products and activities.

Sub-Objectives

1A. To measure household patterns of energy use with respect to the forms of energy consumption identified above. These patterns will be based on the model presented in Figure 1 and will involve measures concerning:

- type of energy consumption (gas, oil, electricity, etc.)
- amount of energy consumption
- activity underlying energy consumption (home, work, leisure)
- discretion involved in energy consumption (discretionary vs. non-discretionary)

1B. To develop several taxonomies of Canadian households based on their energy use patterns.

Objective 2

To establish the relationship in the Canadian setting between patterns of energy consumption and household characteristics.

Sub-Objectives

2A. To identify and measure those household characteristics which might explain patterns of energy use for the most significant forms of energy consumption as selected above.

2B. To analyze the extent to which the measured household characteristics explain energy consumption patterns.

Objective 3

To determine the relationship between patterns of energy consumption and consumer lifestyles, attitudes, interests, opinions and knowledge.

Sub-Objectives

3A. To develop a set of lifestyle/Attitudes, Interests, Opinions, Knowledge (AIOK) scales appropriate to the study of energy consumption in Canada.

3B. To measure consumer (household) opinions with respect to the lifestyle/AIOK scales prepared above.

3C. To classify consumers/households based on responses to lifestyle/AIOK measures.

3D. To analyze the extent to which lifestyle/AIOK measures and classifications help to identify different consumer segments for which different policies may be appropriate.

Objective 4

To identify and conduct preliminary evaluations of the dimensions of alternative policy proposals related to product/service design and use which might reduce levels of energy consumption.

Sub-Objectives

4A. To identify persuasive and mandatory policy mechanisms for influencing product design and use which will reduce levels of energy consumption.

4B. To conduct a preliminary evaluation of consumer responses to a range of policy mechanisms to affect the design/use of automobile, home heating facilities and other selected products/services.

4C. To identify the most promising policy mechanisms with respect to the above products/services which require extensive study to arrive at detailed policy recommendations.

4D. To examine the relationship between consumer segments and the dimensions of alternative policy mechanisms.

BACKGROUND TO THE RESEARCH

In Canada, individual consumption patterns are having a detrimental effect on the environment. There is a growing recognition that part of the solution is to encourage people to become more conservation oriented (as opposed to consumption oriented) in their buying behavior. This proposed study focuses on this problem by obtaining a better understanding of the attitudes and behavior of people who are "consumers" and "conservers" and by identifying their receptivity to alternative policy proposals to reduce energy consumption. The results will have implications for both marketers and government officials regarding price strategies, information programs and policy options which could encourage conserver behavior.

The arguments for a "conserver" versus a "consumer" society have been eloquently expressed in a series of papers by the "Gamma" researchers[35] and the Science Council of Canada.[9] Simply stated, if Canada does not move from a consumer to a conserver society, the well-being of future generations can only depend on new, and as yet unknown, technological breakthroughs.

Canadians are frequently inefficient consumers causing unnecessary depletion of non-renewable resources, in particular energy fuels. In spite of substantial publicity concerning environmental issues, many Canadian consumers do not appear to be altering their behavior but instead are continuing purchasing patterns leading to further resource depletion. One reason for this behavior is that consumers place a high premium on convenience, leading to a substitution of labor-saving devices for individual energy. The existing marketing system encourages this behavior and the traditional economic model does not appear to recognize long-run supply and demand problems (analagous to the "Fly Now - Pay Later" philosophy) nor

does it distinguish effectively between renewable and non-renewable resources.

The two main strategies for changing or modifying buyer behavior are manipulation of supply (e.g. rationing, prohibiting sales of selected products) or demand (e.g. increasing price through taxation, persuading consumers to reduce purchases). To determine the most effective strategies, it is necessary to collect information on the value systems of Canadians related to their attitudes and behavior on social responsibility and energy conservation. A more comprehensive profile of the socially responsible consumer is required to ascertain not only the size of this "conserver" segment but also the reasons why they hold their views. Further, little is known about the promotional appeals that are likely to have the strongest possible attraction for the conserver segment. Various appeals have been used but their degree of effectiveness has not been measured on a segment basis.

The importance of identifying appeals or strategies which can increase conserver behavior can be illustrated by the following:-

(a) if thermostats were lowered an average of 3 degrees Celsius, the equivalent of approximately 60,000 barrels of oil per day would be saved.

(b) if all homes had 6 inches of insulation, the equivalent of approximately 60,000 barrels of oil per day would be saved.

(c) if automobiles averaged 21 miles per gallon, approximately 50,000 barrels of oil per day would be saved.

There have been several efforts by government during the past two years to promote the conservation of various forms of energy by attempting to convince consumers of the need to change their behaviour/consumption patterns. Examples include the provision of information with respect to the amount of electricity required to operate different types of appliances, programs to encourage greater insulation of homes, and efforts to re-

duce gasoline consumption by indicating to consumers the mileage obtained by different models of automobiles.

Unfortunately it appears that consumer resistance to behaviour changes in the energy field is strong. In particular, it would seem optimistic to conclude that such behaviour can be influenced effectively in the short run through various forms of promotion/information alone. It also appears that the energy problem is real and that some concrete progress must be made over the next five years in reducing the growth in energy consumption if chaos is to be avoided at some later, and perhaps not-too-distant date. To achieve this goal it may be necessary to resort to legislation restricting the use of energy by consumers. However the best ways of implementing this legislation are not clear. There exist a number of alternatives about which policy makers have little information concerning either their effectivenss or the reaction of the population or sub-segments who must adapt to them.

CONSUMER ATTITUDES AND BEHAVIOUR

Definition

A number of phrases have been used to describe the conserver-type individual including ecology-minded, socially responsible and socially conscious. While there may be some merit in utilizing a series of definitions, for clarity purposes this research will use the term social responsibility as synonomous with the "conserver" dimension. The definition of the socially responsible consumer is one "who takes into account the public consequences of his or her private consumption or who attempts to use his or her purchasing power to bring about social change."[36] One problem is to develop measures of this definition which have both attitude and behavior components.

Past Research

Previous investigations of social responsibility have focused mainly on pollution or environmental issues but few have examined energy conservation, per se. The majority of studies were designed to measure the differences between groups of consumers who did or did not exhibit a certain attitude or behavior pattern (e.g. used or did not use a recycling service).

The attitude/behavior measures which have been used are shown in Exhibit 1. Many of the measures were devised for specific studies and are illustrative of the assumptions made about social responsibility (e.g. purchase of low phosphate detergents as a surrogate). The limitation of this approach is that a variety of attitudes/behavior measures usually were not taken and little can be said about the consistency or breadth of socially responsible behavior.

Exhibit 2 provides a summary of the findings concerning the socially responsible consumer. The findings, particularly in the personality area, are indicative of the types of studies conducted. Generally, a dependent variable was constructed (either an attitude measure of social responsibility or a behavior measure such as "used a recycling service") and a number of independent variables (e.g. personality measures) were related to the dependent variable. Because of definitional differences, the findings vary and there is a lack of consistency in the results. The pattern that does emerge is that socially responsible consumers tend to be younger, better educated and have a higher income than the average consumer. They tend to think business has too much power, that individuals can affect change in a system, and they tend to be less conservative, more tolerant and less status conscious.

Studies directly related to consumer attitudes and behavior towards energy conservation have found that, in general, consumers are sympathetic regarding ene.gy conservation (e.g. think its a good thing) but show little behavior change.[33] Individuals who are energy conscious tend to be more economy minded and, not surprisingly, conservation minded.[14] Two experiments have been conducted measuring the effect of information on energy consumption (electrical).[11,29] In one case, energy conservation intentions increased with information but short-term actual consumption remained constant.[11] In the second case, a 2 to 3 percent reduction in energy use was obtained. It was concluded that the provision of better consumption information will aid in energy conservation.[29]

A three wave survey, commissioned by the Department of Energy, Mines, and Resources offers a benchmark for future research in Canada. The survey provides the following insights:

(a) Energy conservation does not rank as a serious problem for the vast majority of Canadians.

(b) While respondents feel that individual efforts to conserve energy can be very important, most are unlikely to reduce personal use.

(c) Respondents want government to play a role but of a voluntary nature such as advising consumers how to save.

(d) Energy costs are perceived as increasing more rapidly than other costs, by the majority of respondents.

(e) Consumers express a clear preference for government to employ "carrot" alternatives (e.g. tax breaks for insulation) rather than "sticks" (e.g. rationing).

(f) Substantial numbers of respondents state they are adopting some type of conserver behavior.

(g) Overall, respondents appear to hold favourable attitudes towards conserving behavior but it is debatable if their actions are in line with these attitudes.

Implications

In reviewing these studies a number of implications for further research become apparent:

(a) There is a need to develop a more comprehensive model of the socially responsible consumer which includes better attitude and behavioral measures. That is, what is required is a more complete look at the individual and the type of behavior under study.

(b) There is a suggestion that a socially responsible consumer may not be entirely consistent in his/her purchase behavior. Further, ecology minded and socially conscious consumers may be related but not on a one-to-one basis. Again, there is a need to obtain more comprehensive measures.

(c) Future studies should incorporate "levels of concern" measures for various social/ecological problems.

(d) There is a need to determine if certain government policies or programs have a greater chance of acceptance by the responsible consumer segment than by other groups in the population.

In summary, past research has shown there is a segment of the population which holds conserver or socially responsible attitudes but the size and composition of that segment is unclear. This research examines this and related issues.

CONSUMER POLICY PREFERENCES: ENERGY CONSERVATION

The focus of the latter part of the project is to conduct a preliminary investigations of the alternative government policies which can impact on consumers with respect to energy consumption. A number of dimensions of policy are involved (e.g. mandatory/persuasive; monetary/nonmonetary) which need to be considered in relation to products/services and design/use. This project will identify policy alternatives in the area of automobile design/usage, home heating facilties, and other selected products. Consumer reaction to these possible alternatives will be tested in order to identify realistic options that can be examined in greater detail.

The results will lead to specific recommendations for further investigations which consider consumer "preferences" for types of policy options that can reduce energy consumption. For example, a wide range of options exist with respect to automobile design, purchase, and usage which can reduce energy consumption. Further, consumers can engage in a number of activities which may increase/decrease their energy consumption vis-a-vis the automobile. At issue is what specific policy alternatives are most relevant considering the respective viewpoints of the consumer and the policy maker.

Given this basic problem setting, the essential goal fo the research is to obtain from consumers an insight into those alternatives which are most/least realistic. The research will explore a series of alternatives/situations which may face consumers and identify their general courses of action (i.e. what are they most/least likely to do).

PROPOSED RESEARCH

Overview

The research can best be described as a collection and analysis of information in three areas; consumer (household) consumption of energy, household characteristics and AIOK data, and policy alternative reaction. Household energy consumption includes obtaining information on the amount of energy consumed with respect to the automobile, home heating, and other selected products. In addition, the research will identify how that energy is consumed (e.g. home, work and leisure activities) and the type of energy consumed.

The household characteristics and AIOK data collected will be used to idenfity consumer types and assist in the understanding of respondents who are high or low energy users. A preliminary questionnaire dealing with the

AIOK data is presented in Appendix A. It will be pretested to reduce the length of the questionnaire, determine the validity of some of the research assumptions, and eliminate respondent problems in answering the questions.

Finally, policy alternative reaction information will be collected. The questions to be used in this are will be identified through pretesting of various measurement techniques.

Methodology

Personal interviews with a drop-off questionnaire will be used to collect the data. The personal interviews will collect information on household characteristics, use behaviour related to the automobile, home heating and other selected products, and policy alternative reaction. At that time, a questionnaire dealing with the AIOK information will be left to be completed by selected household members 16 years of age or over.

In order to obtain both a geographic and urban/rural representation, interviews will be conducted in ten Canadian communities, five metropolitan centres and five rural areas. The proposed sampling plan is as follows:

(a) 150 interviews to be conducted in each of five cities; Halifax, Montreal, Toronto, Calgary and Vancouver.

(b) 50 interviews to be conducted in each of five rural areas (towns with populations under 10,000); Nova Scotia, Quebec, Ontario Alberta, British Columbia.

Budget

Data Collection (1000 interviews x $39 per interview)	$ 39,000
Travel (primarily for principal researchers between Halifax, Montreal, Toronto, Calgary and Vancouver. Also includes research assistant travel)	$ 12,000
Office expenses (including questionnaire design, printing, translation, coding/keypunching, typing, data processing, report preparation, telephone)	$ 10,800
Research Assistants (a total of 14 months of research assistant(s) time will be required at $1,200 per month)	$ 16,800
Honorarium (Principal Researchers)	$ 25,000
	$103,600

Timetable

May - August 1978: Instrument Design and Pretesting

- literature review
- preliminary questionnaire design
- pretest questionnaire
- prepare final questionnaire
- sample design

September - December 1978: Data collection

- contract with research house(s)
- data collection (sample of 1000 housholds: 5 major Canadian cities: 5 rural areas)
- coding, keypunching, editing

January - March 1979: Analysis, Conclusions, Implications

- analysis
- preparation and presentation

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FIGURE 1

CONSUMER BEHAVIOR AND ENERGY USE - A FRAMEWORK FOR RESEARCH

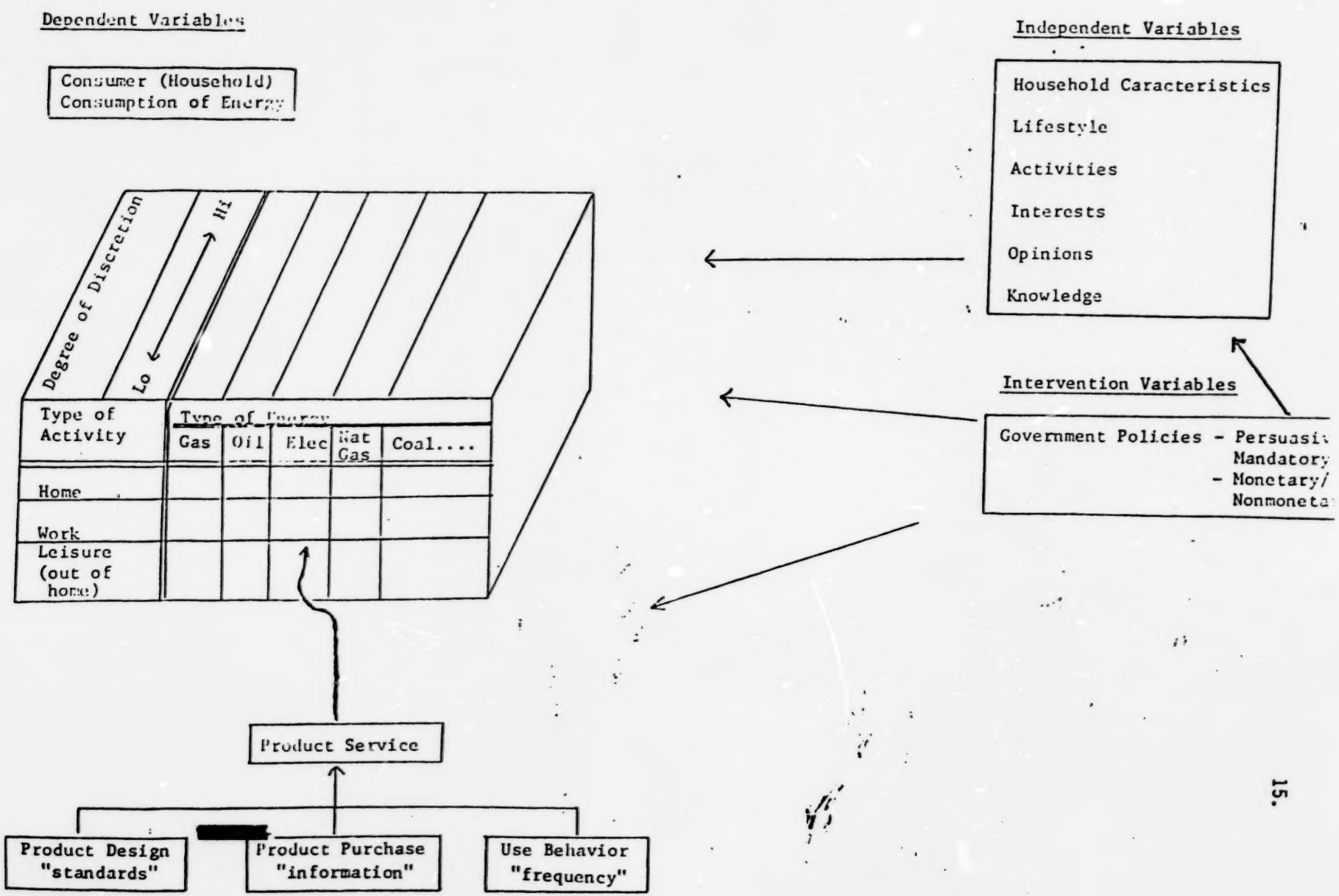

Exhibit 1

Socially Responsibility Measures

		Reference
Attitude		
1.	Socially Responsibility Index	(6)
2.	It is futile for the individual consumer to do anything about pollution.	(17) (36)
3.	When I buy products I try to consider how my use of them will affect the environment and other consumers.	(36)
4.	Big business has too much power in this country.	(22) (36)
5.	Self-actualizing personality measure.	(7)
6.	Importance/attainment of environmental goals.	(34)
7.	Social Responsibilty Scale.	(27)
8.	How important a problem do you consider pollution in Canada today?	(22)
9.	Would you be willing to have your laundry less bright or white in order to be sure you were using a non-polluting laundry product?	(22)
10.	The government should force all products that pollute off the market.	(22)
11.	I think a person should urge her friends not to use products that pollute.	(22)
12.	Do you think that all consumers should be interested in the pollution aspects of the products that they purchase?	(22)
13.	To what extent would you describe yourself as being interested in the pollution aspects of the products you purchase.	(22)
Behavior		
1.	Respondent subscribed to and actually used a commercial recycling service.	(36)
2.	Respondent had tried and used regularly; low lead or lead-free gasoline, low phosphate detergents, beverages in returnable bottles.	(36)

Behavior (continued)

	Reference
3. Respondent had; used a recycling service, disconnected his cars pollution control device if it had one, reused paper grocery shopping bags, reduced usage of petroleum products and electricity during the Winter '73-74 fuel shortage, ever refused to buy a product involved in a labor dispute.	(36)
4. What brand of laundry products do you usually buy for washing clothes? (identify if phosphate free or not)	(22)
5. Have you ever done anything that differed from your usual shopping pattern in order to purchase a product that was low in pollutants or had no pollutants?	(22)
6. Delivery of materials for recycling to sites operated by a local ecology organization.	(1)
7. Membership in Better Life (a firm that collected recycling materials on a door-to-door basis).	(13)
8. Purchase of gasoline, detergent, paper towels, bathroom tissues.	(13)
9. Respondent had sent for a booklet entitled "100 Ways to Save Energy and Money in the Home".	(14)

Exhibit 2

Findings Concerning The Socially Responsible Consumer

Variable Type		Reference
Demographic-Socioeconomic	Younger than average	(1) (2) (3) (4) (5) (6) (28) (33)
	Better education	(2) (5) (6) (12) (23) (27) (28) (31) (36)
	Higher status occupations	(1) (2) (3) (12) (15) (23) (27) (28) (32)
	Average income greater than $14,000	(5) (22) (23) (27) (28) (31) (36)
Personality	Less dogmatic	(1) (2)
	Less alienated	(1)
	Less conservative	(1) (2) (3) (18) (31)
	More conservative	(6)
	Less status conscious	(2) (5) (20)
	More cosmopolitan	(1) (2) (5) (22)
	Intellectually curious	(22)
	Moderately high in harm avoidance	(1) (22)
	Less personal competence	(1)
	More tolerant	(22) (36)
	More understanding	(22)
	More socially responsible	(1) (6)
	More dominance	(36)
	More responsible	(36)
	More self-actualization	(7)
Attitude	Strong belief in individual's ability to change current problem	(2) (6) (12) (18) (19) (22) (26) (36)
	Negative feelings toward "big business" and in favor of stronger government controls	(4) (18) (36)
	Feel a particular problem is the most important issue facing society today	(22) (27)
	Tolerance to new ideas and understanding	(22)

		Reference
Psychographic	Likes to belong to and participate in community and service organizations	(5) (6) (18) (22) (32)
	Places more emphasis on durability as opposed to fashion	(5)
	Perceives value for money opposed to "pizzazz"	(5)
	Highly involved in community	(6)
	Likely to contribute money and time to social causes	(6)
	Interested in local and national politics	(6)
	More informed about political issues and candidates	(6)
Behavior	Used recycling service	(2) (13) (36)
	Used low lead or lead-free gasoline	(7) (36)
	Used low phosphate detergents	(7) (22)
	Used beverages on returnable bottles	(7) (36)
	Reused paper grocery shopping bags	(36)
	Reduced usuage of petroleum products and electricity	(36)
	Refused to buy a product of a firm involved in a labor dispute	(36)
	Used recycled products (paper towels, bathroom tissue)	(13)

APPENDIX A

Preliminary Questionnaire

SECTION I

INDIVIDUAL VALUE SYSTEM

A. Social Responsibility Scale (Modified)

1. It's no use worrying about current events or public affairs; I can't do anything about them anyway.

2. Our country would be a lot better off if we didn't have so many elections and people didn't have to vote so often.

3. It is the duty of each person to do his job the best he or she can.

4. I feel very bad when I have failed to finish a job I promised to do.

B. Convenience

5. I am always looking for new convenience foods that require no other ingredients.

6. I work very hard all the time.

7. I would like to have more appliances that would make my job easier around the house.

8. I often like to do nothing.

9. Disposable products have really improved my way of life.

C. Status

10. One of the things you should consider in choosing your friends in whether they can help you make your way in the world.

11. Ambition is the most important factor in determining success in life.

12. The raising of one's social position is one of the most important goals in life.

13. I like to be considered the leader.

D. Materialism

14. My dream in life is to be able to own expensive things.

15. People judge others by the things they own.

16. I buy some things that I secretly hope will impress other people.

17. Money is the most important thing to consider in choosing a job.

E. Value/Economy

18. I usually dress for comfort rather than fashion.

19. I always check the price before I purchase any product.

20. Sometimes I buy things I really don't need.

21. Shopping for bargains is worth the extra time and effort.

22. I usually watch for sales before I go out and buy.

F. Protestant Ethic

23. I often buy lottery tickets.

24. People should put their savings into investments, not products.

25. I like to pay cash for everything I buy.

26. To buy anything other than a car or house on credit is unwise.

27. Our family is too heavily in debt today.

G. Miscellaneous

28. I love the fresh air and out-of-doors.

29. I would rather live in or near a big city than in or near a small town.

30. Dressing well is an important part of my life.

31. I would rather spend a quiet evening at home than go out to a party.

SECTION II

LEVEL OF CONCERN

A. The ecology/pollution issue

28. I feel people worry too much about pesticides on food products.

29. When I think of the ways industries are polluting, I get frustrated and angry.

30. The whole pollution issue has never upset me too much since I feel it's somewhat overrated.

31. The non-medical use of drugs is more serious problem in Canada than pollution.

32. I get very disturbed when I see people littering our parks and streets.

33. If things continue on their present course, mankind will soon experience a major ecological catastrophe.

34. Unemployment and inflation are far more serious problems in Canada than pollution or energy conservation.

B. The energy issue

35. I think that because of the energy crisis everyone should lower their heat to 68 degrees or less.

36. Energy conservation is the most important problem facing us today.

37. Everyone who lives near bus routes should take the bus if it gets them close to where they want to go.

38. Responding to an energy conservation program is a good idea.

39. I'm not willing to sacrifice so that all will have energy.

40. Putting additional insulation in a home is not worth the extra effort.

41. Driving at reduced speeds is not worth the effort considering the amount of energy saved.

42. It is every Canadian's patriotic duty to conserve our natural resources.

43. Products that reduce energy consumption are worth the extra cost.

C. Government/Business/Societal Direction

44. Business today has too much power.

45. Our Federal Government is too big and powerful.

46. I think consumers are becoming more interested in the pollution aspects of products they purchase.

47. Our society is preoccupied with economic growth and pays too little attention to environmental quality.

48. If it costs them money, most business firms will not do anything about pollution.

49. It genuinely infuriates me to think that the government doesn't do more to help control pollution of the environment.

50. The single most important goal of any business is to maximize profits.

D. Verbal Commitment to Ecology

51. I would probably never join a group or club which is concerned solely with ecological issues.

52. I would be willing to use a rapid transit system to help reduce air pollution.

53. I'm really not willing to go out of my way to do much about ecology since that's the government's job.

54. I would donate a day's pay to foundation to help improve the environment.

55. I would be willing to stop buying products from companies guilty of polluting the environment, even though it might be inconvenient.

E. Actual Commitment

56. I don't make a special effort to buy products in recyclable containers.

57. I have attended a meeting of an organization specifically concerned with bettering the environment.

58. I have switched products for ecological reasons.

59. I have never joined a cleanup drive.

60. I subscribe to ecological publications.

61. I have signed a petition concerning an environmental issue.

E. Actual Commitment (continued)

62. I have contributed money to an environmental organization.

63. I am a member of the Consumers Association of Canada.

64. I am a member of Concerned Citizens of Canada.

65. I only purchase soft drinks in returnable bottles.

66. I have reused paper grocery shopping bags.

67. I have delivered materials for recycling (e.g. - paper, glass bottles).

68. I have used disposable products (paper plates, disposable diapers).

F. Perceived Ability to Change System

69. The individual consumer does not have much of a chance to change business.

70. It is futile for the individual consumer to try and do anything about pollution.

71. The only way environmental problems can be solved is if we change our political system.

72. The only way to cure many of society's problems is through increased government control.

73. It is futile for the individual consumer to do anything about energy conservation.

74. Environmental problems can be solved if enough people become involved.

SECTION III

ALTERNATIVE ACCEPTABILITY

75. Supermarkets should charge customers for the paper bags that groceries are put in.

76. There should be a special tax put on any product that pollutes the environment.

77. People should be required to separate their tin cans and other recyclable trash from the rest of their trash.

78. The price of gasoline should be increased so that people will use less.

79. People who purchase large cars should have to pay a lot for license plates.

80. People should be required to bundle and return old newspapers and magazines to recycling plants.

81. People should not be allowed to drive their car to work unless they have at least two passengers.

82. If the government has to raise taxes by 10 percent to reduce or eliminate pollution, they should do it.

83. No matter how many people are put out of work, the government should not allow soft drinks to be sold in cans or non-returnable bottles.

84. Automobile manufacturers should not be allowed to produce large cars.

85. The government is spending too much money on pollution problems.

86. The government should have stricter laws to stop firms that pollute.

87. Stricter laws should be introduced to reduce the amout of packaging for products.

88. Milk should only be sold in the three quart returnable jugs.

89. People should be required to bring their own shopping bags to supermarkets.

90. All liquor and wine bottles should have a deposit so that they can be returned and recycled.

STRUCTURE OF QUESTIONNAIRE

	page
A. Home Heating Expenses	1
B. Home Electricity Expenses	2
C. Gasoline Expenses	3
D. Info on Dwelling Unit	4,5
Product Ownership	6
Info on Household Members	7
Opinions	8,9,10
Activities	11
Energy Knowledge	12
Scenarios	13, 14
Conservation	15

ANNEX B

QUESTIONNAIRE AS DEVELOPED TO

AUGUST 31, 1978

This is a study of household and gasoline expenses. We have two types of questions

Type 1. Questions about actual heating, electricity and gasoline expenses

Type 2. Opinions and household activities regarding these same areas

Type 1 Questions: These questions are on the green page(s). We are very interested in getting answers that are as accurate as possible. For example, when answering the questions about your heating bills, we would very much appreciate it if you could take the time to look up old bills, receipts or cheque stubs. Another way of making sure the information is accurate might be to discuss it with the person who usually pays the bills. If you do not keep any record of the expense we will ask for your best estimate. In either case your time and efforts for the Type 1 questions is very important.

Type 2 Questions: These questions are on the white pages. Although we think these questions are important also, you will find them easy to answer. In other words for these questions you won't have to look up old bills.

A. HOME HEATING EXPENSES

If you do not pay your home heating (such as when heat is included in your rent) check box ☐ and GO TO B

If your home is heated electrically, check box ☐ and GO TO B

HOW MUCH DID IT COST TO HEAT YOUR HOME OVER THE LAST 12 MONTHS?

- If you have records (such as bills, receipts, cheque stubs) of past heat expenses, please fill in the table. Record your heating expenses over the last 12 months.

Date or Period	Heating Bill
Example: Jan. 16 - Mar. 15, 1978	*$71.54*

- Is there anything other than heating expenses included in these bills (such as, electricity or water)? Yes ☐ No ☐

  If yes, what? _____

If you have no records, what was the approximate total cost of heating your home over the last 12 months? _____

B. HOME ELECTRICITY EXPENSES

If you do not pay for your electricity, such as when it is included in the rent, check box ☐ and GO TO [C]

HOW MUCH DID YOU PAY FOR ELECTRICITY OVER THE LAST 12 MONTHS?

- If you have records (such as bills, receipts, cheque stubs) of past electricity expenses, please fill in the table. Record your electricity expenses over the last 12 months.

Date or Period	Electricity Bill
Example: June 1 - July 31 1978	*$19.38*

- Is there anything other than electricity included in these bills (such as natural gas or water)? Yes ☐ No ☐

If yes, what?_____

If you have no records, what was the approximate total cost of electricity for your home over the last 12 months?

_____

C. GASOLINE EXPENSES

If there are no vehicles (autos, vans or light trucks) used by people in your home, check box ☐ and GO TO D

How many vehicles are owned, leased, or usually kept at this residence by people in this household? (Check one)

☐ one ☐ three

☐ two ☐ four or more

For each vehicle please fill in the table. If there are more than 3 vehicles, just fill in the table for 3 of them (preferably the 3 that get used most). It does not matter which vehicle you fill in as "Vehicle #1".

	Example	Vehicle #1	Vehicle #2	Vehicle #3
Make?	*Chev.*			
Year?	*'74*			
Model?	*Impala*			
Number of cylinders?	*8*			
Air conditioner?	*No*			
Miles per gallon on highway?	*18*			
Miles per gallon in city?	*13*			
Miles driven in last 12 months?	*11,500*			
If owned less than 12 months .. when purchased? .. miles since purchase?	-- --			
Percentage of driving in city?	*70%*			
Days per week taken to work or school?	*5*			
Distance to work or school?	*3½*			
Used by someone for their work?	*No*			

D. "TYPE 2 QUESTIONS"

INFORMATION ON DWELLING UNIT

1. What type of dwelling do you live in?

- ☐ Single detached house
- ☐ Semi-detached or side-by-side double → For these, how many stories?
  - ☐ one
  - ☐ two or more
  - ☐ split level
  - other (specify)_____
- ☐ Duplex, Triplex, Fourplex
- ☐ Row or townhouse
- ☐ Apartment or flat
- ☐ Mobile home
- Other (specify)_____

2. What is the approximate age of your dwelling?_____years,
   _____don't know

3. Next, some information about the rooms in your home

. On the main floor do you have: (check (✓) or fill in number of rooms)

separate dining area _____
family or recreation room _____
den or sewing room _____
number of bedrooms _____

. On the second floor (check (✓) or fill in number of rooms)

number of bedrooms _____
den or sewing room _____
other (specify #) _____

. In winter, do you heat your basement, or do you try to close off the heat to this area?

Heat ☐
Close off ☐
No basement ☐

. Do you have a garage which is attached or part of your home?

Yes ☐ No ☐

4. How is your home heated?
   - ___ natural gas
   - ___ oil
   - ___ electricity
   - ___ other (specify) _____
   - ___ don't know

5. How is your water heated?
   - ___ natural gas
   - ___ oil
   - ___ electricity
   - ___ other (specify) _____
   - ___ don't know

6. Is your kitchen stove
   - ___ natural gas
   - ___ electricity
   - ___ other (specify) _____
   - ___ don't know

7. Is there an automatic clothes dryer in the house? ___ yes ___ no

   If yes,
   - ___ natural gas
   - ___ electricity
   - ___ don't know

8. In winter, at what temperature do you normally set your thermostat

   - during the day? _____ degrees
   - when you go to bed? _____ degrees
   - in the evening when at home _____ degrees
   - when nobody is home for 4 to 5 hours? _____ degrees
   - when nobody is home for 24 hours or more? _____ degrees

9. How many, if any, of the following products are owned by people living in this household?

How often is each type of product used (indicate number of times per day, or times per week, or times per month)?

	Fill in the number owned	Fill in frequency of use
Example: Microwave oven	*1*	*4 times a day*
1. Colour TV		
2. Black & White TV		
3. Automatic clothes dryer		
4. Automatic clothes washer		
5. Separate home freezer		
6. Automatic dishwasher		
7. Microwave oven		
8. Air conditioner (separate or central)		
9. Sewing machine		
10. Electric blender		
11. Floor polisher		
12. Stereo		
13. Electric saw (circular or bench)		
14. Chain saw		
15. Humidifier		
16. Snowmobile		
17. Snowblower		
18. Motor driven boat		
19. Frost-free refrigerator		
20. Manual defrost refrigerator		
21. Overnight camping equipment (trailer, truck camper)		
22. Swimming pool		
23. Vacation home (cottage)		

INFORMATION ABOUT PEOPLE IN HOUSEHOLD

The following information will be kept in absolute confidence. We need the information so that we can calculate the average age, family size, etc., of our sample.

How many people live in your household? _____

Please fill in the chart for each person 16 and over.

Education Categories

1. less than 9 years of schooling
2. 9 to 11 years
3. high school graduate
4. some college
5. college graduate
6. 2 or more university degrees

Yearly Income Categories

1. under $6,000
2. $6,000 to $10,000
3. $10,000 to $15,000
4. $15,000 to $20,000
5. $20,000 to $25,000
6. $25,000 to $40,000
7. Over $40,000

Age	Sex [M or F]	Marital Status	Occupation	Works 30 hours or more per week? [Yes or No]	Education Category	Yearly Income Category
Example: 43	*M*	*single*	*accountant for trucking company*	*yes*	*5*	*4*

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Example: 43	*M*	*single*	*accountant for trucking company*	*yes*	*5*	*4*

OPINION QUESTIONS

We would like you to think about the follow issues and tell us how seriously you feel each one is affecting us in Canada today.
(Check (✓) how seriously each is affecting us)

	Very Seriously	Somewhat Seriously	Not too Seriously	Not seriously at all	Don't know N/A
Inflation	_____	_____	_____	_____	_____
Cost of energy	_____	_____	_____	_____	_____
Unemployment	_____	_____	_____	_____	_____
Pollution	_____	_____	_____	_____	_____
Energy shortage	_____	_____	_____	_____	_____

In the next section there are listed a number of statements about interests and opinions. After each statement the numbers 1 to 6 appear. The lower the number, the more you disagree with the statement. The higher the number, the more you agree with the statement. The numbers from 1 to 6 can be described as follows:

1. I definitely disagree with the statement.
2. I generally disagree with the statement.
3. I moderately disagree with the statement.
4. I moderately agree with the statement.
5. I generally agree with the statement.
6. I definitely agree with the statement.

There are no right or wrong answers. For each statement, please circle the number that best describes your feelings about that statement. You may think that some items are similar but no two statements are exactly the same. Please be sure to mark one number for each statement.

	Definitely Disagree					Definitely Agree	
People should be required to bring their own shopping bags to supermarkets.....	1	2	3	4	5	6	(1)
I would be willing to pay double the current price for gasoline if I thought all Canadians would use less.....	1	2	3	4	5	6	(2)
Three quarts of milk should only be sold in returnable jugs.....	1	2	3	4	5	6	(3)
Dressing in the latest fashion is an important part of my life.....	1	2	3	4	5	6	(4)
I often like to sit back and do nothing.....	1	2	3	4	5	6	(5)
I operate on a budget.....	1	2	3	4	5	6	(6)
Energy conservation is the most important problem facing us today.....	1	2	3	4	5	6	(7)
no use worrying about current events or public affairs; I can't do anything about them anyway...	1	2	3	4	5	6	(8)
There are just too many disposable products around today.....	1	2	3	4	5	6	(9)

	Definitely Disagree					Definitely Agree	
I think that because of the energy crisis households should lower their heat to 68°F or less in winter	1	2	3	4	5	6	(10)
I like new cars better than old cars	1	2	3	4	5	6	(11)
These days you have to take things as they come, you can't plan ahead	1	2	3	4	5	6	(12)
The "energy crisis" is a hoax created by the government, utilities, and corporations	1	2	3	4	5	6	(13)
There is no real need to conserve energy because technology will solve the problem	1	2	3	4	5	6	(14)
The single most important goal of any business should be to maximize profits	1	2	3	4	5	6	(15)
People should not be allowed to drive their car to work unless they have at least one passenger	1	2	3	4	5	6	(16)
I would not work if I didn't have to	1	2	3	4	5	6	(17)
Many companies are taking advantage of the energy crisis to increase their profits unfairly	1	2	3	4	5	6	(18)
It is futile for the individual consumer to do anything about energy conservation	1	2	3	4	5	6	(19)
Automobile manufacturers should not be allowed to produce large cars	1	2	3	4	5	6	(20)
I buy some things that I secretly hope will impress other people	1	2	3	4	5	6	(21)
I have read a lot about energy conservation	1	2	3	4	5	6	(22)
Government should regulate the quality and production of products made by businesses	1	2	3	4	5	6	(23)
These days, it's difficult to find products that last	1	2	3	4	5	6	(24)
Shopping for bargains is worth the extra time and effort	1	2	3	4	5	6	(25)
There is no real need to conserve energy since we have plenty of gas and oil	1	2	3	4	5	6	(26)
People who purchase large cars should have to pay $300 a year for license plates	1	2	3	4	5	6	(27)
Money is the most important thing to consider in choosing a job	1	2	3	4	5	6	(28)
Ready-to-serve foods are important because they let you save time for more important activities than cooking	1	2	3	4	5	6	(29)
If things don't change in Canada we'll probably run out of gas and oil within 15 years	1	2	3	4	5	6	(30)
I always use a seatbelt, even for short drives	1	2	3	4	5	6	(31)
Most businesses are not doing anything about energy conservation	1	2	3	4	5	6	(32)
It is important to have a good looking car	1	2	3	4	5	6	(33)
Not enough Canadians are concerned about energy conservation	1	2	3	4	5	6	(34)
A subcompact car can meet my transportation needs	1	2	3	4	5	6	(35)
My basic philosophy is "live for today"	1	2	3	4	5	6	(36)
I often think about what it will be like to live in Canada in 10 years	1	2	3	4	5	6	(37)
I work very hard all the time	1	2	3	4	5	6	(38)
Saving energy now is important because it is the only way we can avoid rationing	1	2	3	4	5	6	(39)
I always check the price before I purchase any							

	Definitely Disagree					Definitely Agree	
Supermarkets should charge customers 10¢ for the paper bags that groceries are put in.....	1	2	3	4	5	6	(41)
s futile for the individual consumer to try and do anything about pollution.....	1	2	3	4	5	6	(42)
Everyone who lives near bus routes should take the bus if it gets them close to where they want to go.....	1	2	3	4	5	6	(43)
I sometimes find myself judging others by the things they own.....	1	2	3	4	5	6	(44)
The government is spending too much money on energy conservation.....	1	2	3	4	5	6	(45)
Business today has too much power.....	1	2	3	4	5	6	(46)
If things continue on their present course, mankind will soon experience a major ecological disaster..	1	2	3	4	5	6	(47)
I would be willing to pay $50 a year for a program that really helped Canada save energy.....	1	2	3	4	5	6	(48)
The individual consumer does not have much of a chance to change Business.....	1	2	3	4	5	6	(49)
I pretty much spend for today and let tomorrow bring what it will.....	1	2	3	4	5	6	(50)
I am really not willing to go out of my way to do much about energy conservation because that's the governments job.....	1	2	3	4	5	6	(51)
It disturbs me to see large buildings lit at night.....	1	2	3	4	5	6	(52)
I resent utilities and governments asking me to save more energy.....	1	2	3	4	5	6	(53)
The whole "energy issue" is just a passing fad.....	1	2	3	4	5	6	(54)
Individual efforts to save energy don't really help much.....	1	2	3	4	5	6	(55)
Everyone in Canada should only be allowed so much electricity, after that they should pay a high tax on any they use.....	1	2	3	4	5	6	(56)
I'd be willing to set my thermostat at 65°F in winter if I thought everyone else in Canada would.....	1	2	3	4	5	6	(57)
I'd probably buy any new appliance that would save me time to do other things.....	1	2	3	4	5	6	(58)
If Canadians don't reduce the amount of gas and oil they use, in a few years Canada will be too dependent on foreign oil producers.....	1	2	3	4	5	6	(59)
Businesses waste far more energy than consumers do.....	1	2	3	4	5	6	(60)
If we don't save energy now, our children will suffer the consequences.....	1	2	3	4	5	6	(61)
Government and business should be doing the energy saving, not consumers.....	1	2	3	4	5	6	(62)

I have listed below some activities that you, yourself, may or may not have engaged in. For each activity listed, please place an "X" in the appropriate box to indicate how often during the past 12 months you, yourself, have engaged in this activity. (If you have not taken part in one of the listed activities during the past 12 months, "X" the "None in Past Year" box for that activity.) Please make sure that you answer each activity, and that you "X" only one box for each activity.

ONLY ONE BOX FOR EACH STATEMENT	NO. OF TIMES PARTICIPATED IN PAST 12 MONTHS						
	None In Past Year	1-4 Times	5-8 Times	9-11 Times	12-24 Times	25-51 Times	52 or More
1. Visited an art gallery or museum	☐	☐	☐	☐	☐	☐	☐
2. Bought Canadian Government bonds	☐	☐	☐	☐	☐	☐	☐
3. Read a book	☐	☐	☐	☐	☐	☐	☐
4. Played a racquet sport (e.g. - tennis, squash, etc.)	☐	☐	☐	☐	☐	☐	☐
5. Went to a sports game (e.g. - hockey, football, baseball, etc.)	☐	☐	☐	☐	☐	☐	☐
6. Returned an unsatisfactory product	☐	☐	☐	☐	☐	☐	☐
7. Went on a vacation trip, by car, over 500 miles from home	☐	☐	☐	☐	☐	☐	☐
8. Went on a vacation trip, by car, between 100 and 500 miles from home	☐	☐	☐	☐	☐	☐	☐
9. Rode a bus	☐	☐	☐	☐	☐	☐	☐
10. Jogged	☐	☐	☐	☐	☐	☐	☐
11. Worked on collection (stamps, coins, rock, etc.)	☐	☐	☐	☐	☐	☐	☐
12. Worked on a do-it-yourself project around the house	☐	☐	☐	☐	☐	☐	☐

For the following questions we would like you to answer "yes" or "no" or "not applicable" (N/A)

	Yes	No	N/A
1. In the last year I have joined a clean-up drive	—	—	—
2. In the last year, I have delivered materials for recycling (e.g.—paper, glass bottles, tin cans).	—	—	—
3. I only purchase soft drinks in returnable bottles	—	—	—
4. I have a government publication on energy conservation	—	—	—
5. In the last year I have spent more than $100 on insulation for my home	—	—	—
6. The present car I own is smaller than the last car I owned	—	—	—
7. In the last twelve months I have had my car tuned up at least twice	—	—	—
8. Every year I add up my heating bills to find out how much I paid to heat my home	—	—	—
9. I keep a record of the amount I spend on gasoline for my car	—	—	—
10. In the last year, I have kept the thermostat lower than the year before	—	—	—
11. In the last year, I have had our furnace checked by a serviceperson	—	—	—
12. In the last year, I have changed or cleaned the filters in our furnace at least twice	—	—	—
13. I keep a record of the number of miles our car is driven each year	—	—	—
14.	—	—	—

ENERGY QUESTIONS

In this section we are asking some questions to find out how much people like you know about certain things related to energy. Please answer the questions by simply checking "yes" or "no". If the question is not applicable for you (e.g. - you don't have a furnace), please check the N/A category.

		Yes	No	N/A
1.	I know the efficiency rating of my furnace.....	____	____	____
2.	I know how to change the filters on the furnace.....	____	____	____
3.	I know what "R" value means with respect to insulation.....	____	____	____
4.	I know what the "R" value of the walls in my home are.....	____	____	____
5.	I know what the humidity level of my home is.....	____	____	____
6.	I know the thermostat setting on my hot water heater...	____	____	____
7.	I know approximately how many Kilowatt hours of electricity I use each month.....	____	____	____
8.	I know approximately how many Kilowatt hours many home appliances use.....	____	____	____
9.	I know what new cars get the best miles per gallon of gasoline.....	____	____	____
10.	I know how much gas can be saved by driving 55 instead of 70 miles per hour on the highway.....	____	____	____
11.	Leaving lights on saves more electricity than turning them off and then on again.....	____	____	____
12.	The biggest user of energy in the kitchen is usually the refrigerator, not the stove.....	____	____	____
13.	Using a fireplace in winter can actually increase your heating costs.....	____	____	____
14.	Canadians use more energy per person than any other country in the world.....	____	____	____

The next four questions are concerned with voluntary efforts to reduce energy consumption under unusual circumstances.

1. If there was a disruption in our oil supplies which meant that rationing of gasoline was necessary, what is the absolute minimum number of gallons of gasoline your household would need to do their essential driving each week. (Check ( ) one).

no gallons weekly..... ___)
1 - 5 gallons weekly..... ___)
6 to 10..... ___)
11 to 15..... ___)
16 to 20..... ___)
21 to 25..... ___)
over 25..... ___)

2. If there was a disruption in our oil supplies which meant that people were required to cut back their driving, where would you--

a. Rather cut back-- commuting to work/school..... ☐
or shopping trips..... ☐ > Please check one

b. Rather cut back--commuting to work/school..... ☐
or vacation trips..... ☐ > Please check one

c. Rather cut back--commuting to work/school..... ☐
or recreation/leisure/ social trips (visiting friends, out for a drive, going to a show, etc.)..... ☐ > Please check one

d. Rather cut back--shopping trips..... ☐
or vacation trips..... ☐ > Please check one

e. Rather cut back--shopping trips..... ☐
or recreation/leisure/ social trips (visiting friends, out for a drive, going to a show, etc.)..... ☐ > Please check one

f. Rather cut back--vacation trips..... ☐
or recreation/leisure/ social trips (visiting friends, out for a drive, going to a show, etc.)..... ☐ > Please check one

3. If an energy shortage occurred in Canada this winter and Canadians were asked to cut back the temperature in their homes, what temperature would you be willing to keep your home at during the day?

Under 60°F..... ___)
60°F to 63°F..... ___)
64°F to 66°F..... ___)
67°F to 69°F..... ___)
70°F to 72°F..... ___)
over 72°F..... ___)

4. If the demand for electricity grew faster than companies could supply it and Canada was forced to restrict the use of electricity which, if any, of the following measures would you be willing to support:

	Would Support	Would Not Support
a. Having television stations stop broadcasting at 10 o'clock at night.....	____	____
b. Turning off all street lights.....	____	____
c. Having stores closed (with all lights out) three days a week.....	____	____
d. Prohibiting the use of clothes dryers in the home.....	____	____
e. Limiting the use of electric stoves to an hour or less each day.....	____	____

CONSERVATION QUESTIONS

There are a number of ways in which people can save energy. We'd like to find out how much you think could be saved in each of the following situations. Please check the category you think is correct.

1. For each Fahrenheit degree above 68°F you set your thermostat, your fuel consumption goes up an average of--
   1 percent___) 2½ percent___) 5 percent___) 7 percent___) Don't know___)

2. A typical small car which has a 4 speed manual transmission rather than an automatic transmission can increase fuel economy by an average of--
   3 percent___) 7 percent___) 11 percent___) 15 percent___) Don't know___)

3. Using radial tires instead of ordinary tires can mean a fuel saving up to--
   2½ percent___) 5 percent___) 7½ percent___) 10 percent___) Don't know___)

4. The careful driver who practices "energy-wise" habits rather than being a wasteful driver can, in terms of miles per gallon, save up to--
   10 percent___) 25 percent___) 40 percent___) 50 percent___) Don't know___)

5. For every pound your car tires are underinflated, the gasoline mileage loss can be as much as--
   2 percent___) 4 percent___) 6 percent___) 8 percent___) Don't know___)

6. A frost-free refrigerator, rather than a manual refrigerator, increases electricity usage by about--
   20 percent___) 40 percent___) 60 percent___) 80 percent___) Don't know___)

7. Insulating a house that had been poorly insulated can save on fuel by as much as--
   10 percent___) 25 percent___) 40 percent___) 50 percent___) Don't know___)

8. Getting your furnace checked and cleaned twice a year can save you at least--
   5 percent___) 10 percent___) 15 percent___) 20 percent___) Don't know___)

9. Adding storm windows and doors, weatherstripping and caulking can save you up to--
   10 percent___) 25 percent___) 40 percent___) 50 percent___) Don't know___)

10. Finally we'd like to ask you about energy costs--

    a. In the last two years, the type of energy that has risen <u>fastest</u> in price has been--
       Automobile gasoline___) Natural gas___) Electricity___) Home heating oil___)
       Coal___) Don't know___)

    b. In the last two years, the type of energy that has risen <u>slowest</u> in price has been--
       Automobile gasoline___) Natural gas___) Electricity___) Home heating oil___)
       Coal___) Don't know___)

ANNEX C

TIME-TABLE FOR EXECUTION

OF

RESEARCH ACTIVITIES

PROJECT - MONITORING OF PATTERNS OF ENERGY USE BY CONSUMER ACCORDING - TIMETABLE

ACTIVITY	DATE	DETAILED ACTIVITY QUESTIONNAIRE DESIGN PRELIMINARY	PRETEST	FINAL	FIELD PLANNING	DATA COLLECTION	PREPARATION FOR ANALYSIS	DA ANALYSIS	COM CAT
1. Phase One - Questionnaire	August 7/78	x							
2. " " - "	August 14/78		x						
3. " " - "	August 31/78			x					
4. Phase Two - Questionnaire	August 21/78	x							
5. " " - "	August 31/78		x						
6. " " - "	September 15/78			x					
7. Preliminary Cost Estimates - Survey	August 16/78				x				
8. Project Discussion - CCA and EMR	August 18/78								
9. Preliminary Report - Research Plan	August 31/78								
10. Preliminary Sample Design	August 25/78				x				
11. Finalize Sample Design	September 15/78				x				
12. Obtain Bids - Research Firms	September 15/78				x				
13. Select Research Firm	September 25/78				x				
14. Project Discussion - CCA	October 1/78								
15. Print Phase One Questionnaires	October 10/78				x				
16. Print Phase Two Questionnaires	October 10/78				x				
17. Interview - Phase One	Oct.16-Nov.10/78					x			
18. Mail - Phase Two	Oct.16-Dec. 8/78					x			
19. Code and Clean - Phase One	November 30/78						x		
20. Receive, Record, Follow-up-Phase Two	Oct.20-Dec.29/78					x	x		
21. Preliminary Analysis-Phase One	December 15/78							x	
22. Preliminary Report - Phase One	December 29/78								x
23. Preliminary Analysis-Phase One/Two	January 30/79							x	
24. Preliminary Report - Phase One/Two	February 28/79								x
25. Final Report - Phase One/Two	April 30/79								x